

**Illinois Commerce Commission**  
**Pipeline Safety**  
**Field Trip Report**

<b>Operator: NORTHERN ILLINOIS GAS CO.</b>	<b>Operator ID#: 13710</b>
<b>Exit Meeting Contact: Mario Morrell, Manager Storage Operations</b>	<b>Total Man Days: 3</b>
<b>Pipeline Safety Representative(s): Jim Watts</b>	
<b>Company Representative to Receive Report: Leticia Quezada</b>	<b>Emailed Date:</b>
<b>Company Representative's Email Address: lquezad@aglresources.com</b>	<b>12/20/2012</b>

**Inspection Summary**

<b>Inspection Type</b>	<b>Location</b>	<b>ICC Analyst</b>	<b>Inspection Unit(s)</b>	<b>Man Day(s)</b>	<b>Inspection Date(s)</b>	<b>Contact(s)</b>
Standard Inspection - Record Audit	Pontiac	Jim Watts	NICOR - Storage - Pontiac/Lexington	1	10/16/2012	
Standard Inspection - Field Audit	Pontiac and Lexington	Jim Watts	NICOR - Storage - Pontiac/Lexington	2	10/17/2012, 10/18/2012	George Wilson, Mario Morrell, Ron Schulz

**Statement of Activities**

On October 16, 2012 Staff performed a review of the records for the calendar year of 2011 for the Pontiac and Lexington Storage Fields with the audit being conducted at the Nicor Pontiac Storage Facility. The record audit was performed to determine compliance with the applicable Illinois Administrative Codes and the Code of Federal Regulations adopted via Illinois Administrative Code Part 590. The record audit included review of company documents regarding the specific code sections as identified on the attached inspection forms(s).

After completing the record audit, Staff performed field audits of Pontiac and Lexington Compressor Stations and Storage Fields on October 17-18, 2012. The Purpose of the field inspections was to determine compliance with the applicable code sections identified on the attached field audit inspection forms.

The above audits identified the following issues.

192.619 (a) (2) Maximum Allowable Operating Pressure. Staff identified differences in the Maximum Allowable Operating Pressure ("MAOP") defined by Nicor Storage Operations personnel and what was recorded as the MAOP in the Nicor Transmission Integrity Management Plan ("TIMP") Appendix E - Section 1 identified as Gas Transmission Line Segments Operating at 20% Specified Minimum Yield Strength ("SMYS") or more dated 9/15/2011. Nicor Storage personnel indicated the Pontiac Storage Field has an MAOP's of 2160 pounds square inch gauge ("psig") but Appendix E of the TIMP has the weakest segment MAOP of the Mt. Simon portion of the field being 1635 psig. The Lexington Storage Field per Operations has an MAOP of 2025 but when compared to the Appendix E Section 1 data it indicates an MAOP of 1760 due to it being the lowest pressure segment identified in Lexington Storage. Due to these findings Storage Management is working with Engineering and TIMP to determine why the difference in MAOP pressure exists and to determine what the correct MAOP should be for these locations.

Due to observations of deteriorating steel floors in the remaining well houses at Lexington that have not been upgraded to concrete floors, Staff requests that NICOR review their current replacement program schedule. Staff has concerns of the floor conditions creating possible support issues for the pressure vessels located in the well houses observed with corroding floor conditions. Staff observed floor issues at Dady #1 and #2, E. Moore #3, Brokaw #4, Pyne #4 and Fink #3. Corrosion of the steel plating utilized for flooring in the well houses is occurring due to the amount of moisture/sweat that is generated on the piping from within the well house during periods of high gas flows during injection or withdrawal. The excess moisture creates a corrosion cell on the steel floors and over the past several years has deteriorated to a point where large holes or weak floors are present in the well houses at Lexington. Currently Nicor is replacing approximately two well houses at each field annually. The separator vessels are sitting on the metal floor of which has I beam supports under the metal floor. Due to the condition of the

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floors staff is uncertain about the integrity of I beam supports present under the floor. Staff requests that the number of well sites being replaced annually be reviewed and take the necessary actions to ensure adequate support is present for the separator vessels at well sites with flooring corrosion issues.

192.199 (e) Requirements for design of pressure relief and limiting devices. Staff observed the pressure vessel relief vent located at the recently renovated Dawson Cemetery #1 well was not piped outside the well house structure. Staff requests that the vessel relief vent be piped outside the structure to allow for a safe release to atmosphere. Nicor is to inform Staff as to when the relief is piped outside of the structure.

#### **ISSUE(S) FOUND:**

192.619(a) - Staff identified that the MAOP's recorded in the Transmission Pipeline Integrity database for pipelines operating at or above 20% SMYS is not indicating the same MAOP as the records maintained at the Storage facilities. Nicor Engineering is researching the system MAOP due to conflicts observed in MAOP's recorded in the Transmission Pipeline Integrity Program Appendix E Section 1. Staff will be informed of their findings.

192.479(a) - Staff requests that Nicor review the current replacement plan for the well houses that have corrosion issues with the steel floors. Staff requests that Nicor increase the number of well houses being revised from steel floors to rock or concrete floors to ensure the structural integrity of the separator vessel supports and well house is maintained. The steel floors are corroding due to the amount of moisture (sweat) generated from gas piping during high gas flows.

192.199(e) - Staff observed that the relief on the vessel located in a recently revised well house at Dawson Cemetery #1 well in the Lexington Storage Field did not have the relief vent piped outside of the well house. Staff requests that the relief vent piping be piped outside of the well house to allow for the gas to vent freely to atmosphere if the relief were to activate.

192.619(a)(2)ii - While reviewing the MAOP's for Pontiac and Lexington storage fields, Staff established that the MAOP's listed for Pontiac Storage Station 80 and Lexington Storage Station 42 in Appendix E Section 1 titled "Gas Transmission Line Segments Operating at 20% SMYS or More" of the Nicor Transmission Integrity Management Program (TIMP) were not indicating the same pressures. Maps at the Storage facility indicate an MAOP of 2160 while the Appendix E Document indicates the lowest MAOP for Pontiac being 1635. Lexington is also believed to have an MAOP of 2160 with the Appendix E document indicating the lowest pressure of 1760. Due to this observation Staff requests that Nicor establish where the TIMP group got this information from regarding MAOP's and establish the current MAOP for these systems

#### **ISSUE(S) CORRECTED:**

NO ISSUES CORRECTED.

#### **NOTICE OF AMENDMENT(S) FOUND:**

NO NOAs FOUND.

#### **NOA(S) CORRECTED:**

NO NOAs CORRECTED.

#### **NOTICE OF PROBABLE VIOLATION(S) FOUND:**

NO NOPVs FOUND.

#### **NOPV(S) CORRECTED:**

NO NOPVs CORRECTED.